





Tactical Unmanned

Aerial Vehicle

Project Office

Overview

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Agenda



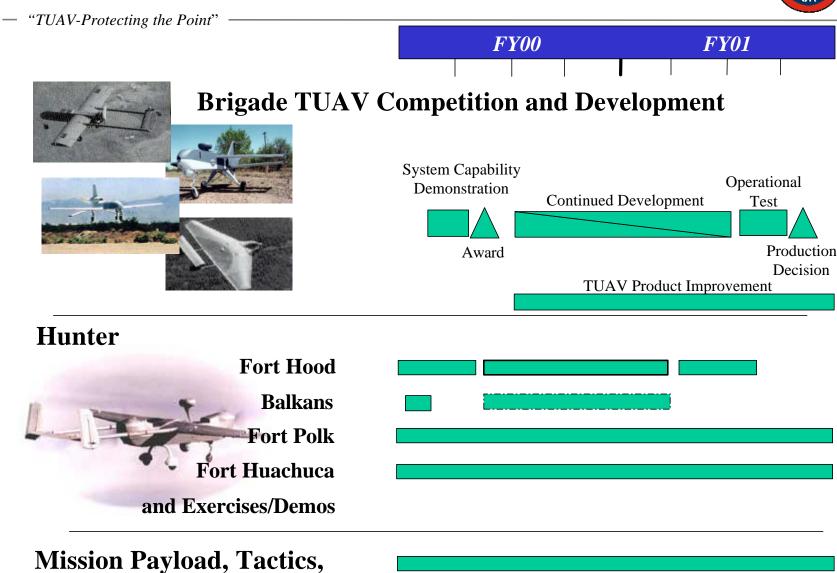
—"TUAV-Protecting the Point"-

- Overview
- Hunter System
- TUAV
- Summary



Activity Overview





Mission Payload, Tactics,
Techniques, Procedures and Development



Hunter Short Range UAV

TUAV



"TUAV-Protecting the Point"

<u>Mission</u>: Division and Corps Level reconnaissance, surveillance, target acquisition, and battle damage assessment



Characteristics/Description:

Wing Span 29 Feet
Weight 1600 Lbs
Range >200KM

Airspeed 90 Kts cruise (106 Kts Dash)

Altitude 15,000 Ft
Endurance 8-12 Hours
Payload (s) EO/IR

Launch/Recovery 200M x 75M (Unimproved)

Capability/Improvements:

- Fully Qualified System
- Versatile Payload Platform
- Multiple Mission Configurations
- CLS Depot Maintenance & Supply in Place
- Stellar NTC/JRTC Performance
- Low mishap rate

Contractors:

• TRW (Prime) / IAI

Status:

- •Acquisition terminated by DAE on 31 Jan 96
- 7 LRIP Systems produced
- •One System Fielded to III Corps, Fort Hood
- •One System in Training Base, Fort Huachuca
- •One System to JRTC Jun 99



RQ-5A Hunter Deployment



Task Force Able Sentry A/15 MI (AEB)

— "TUAV-Protecting the Point"

- Deployed 29 March from Fort Hood
- Based from Skopje, Macedonia
- Began flight operations over Kosovo 4 April
- More than 3500 flight hours through September
- System performance and reliability Excellent
- Forward Depot set up in Germany
- System augmented to total of 12 AVs plus additional ground stations
 - Many missions are relay mode
 - ➤ Able to support 2 simultaneous missions 24 hour operations
- Return to Fort Hood this Fall



Tactical Unmanned Aerial Vehicle



System Meeting

"TUAV-Protecting the Point"

Army Goal: A Single UAV System

Step 1: Field a capable Maneuver Brigade Commander's Best Value

UAV as quickly as possible

- Simple, Basic EO/IR (no bells or whistles)
- Operating in an Army XXI environment
- Meets situational awareness needs

• Part of the triad (Scouts, ACT, UAV) -- allows us to Later Growth to Objective reduce combat power in the heavy division Capability



Best Value Approach TUAV Competition



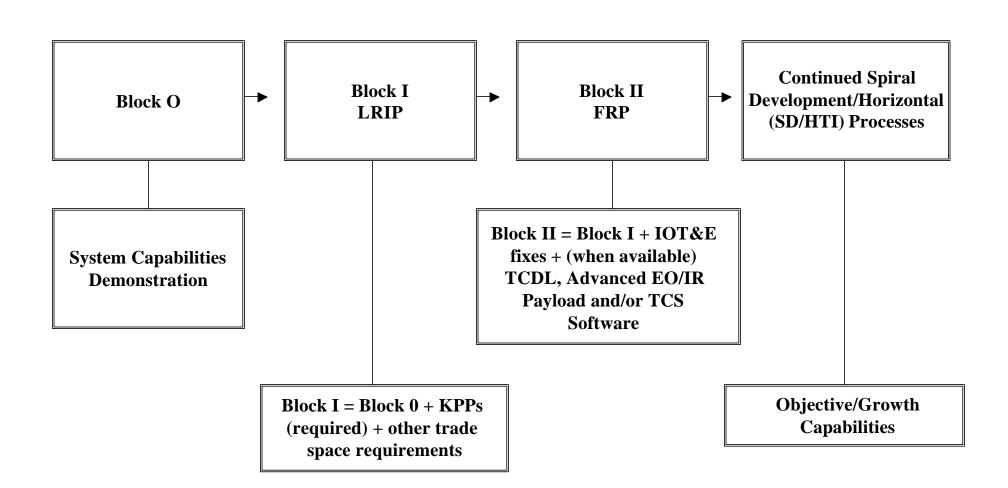
"TUAV-Protecting the Point" **Initial Screen Best Value System** • 8th FRP System UPC \leq \$4M 3 AV Minimum System COMSEC Account Req'd at LRIP Awd MOGAS and or HFE **Key Performance Parameters** • EO/IR Payload MOGAS and or Heavy Fuel C4I Increasing Value of Requirements Go / No Go Group A AV Range/Endurance OPTEMPO Trade Space Take Off / Landing Transportability / Deployability Target Location Error Group B Payload Wt/Space/Power • Mission Planning Functions Portability Remote Video Terminal Performance • AV Performance Group C Manpower/Personnel • Weather Military IFF Interface · Electrical Power · Responsiveness • Ground Communications · Other Data Link Functions · Other GCS Functions • PGCS/PGDT • Maintenance Concept • MTTR · Frequency Bandwidths • NBC Provisions • EMO/EMI Considerations • Information Security • Program Support UAV-SR-13559A-1004-01JUN99



TUAV Block Upgrade Approach



"TUAV-Protecting the Point"





TUAV Schedule



--- "TUAV-Protecting the Point" -

ORD Approval

DAB/Army MS I

Proposal / Fly-Off

MS II

EMD/LRIP

Deliver 4 LRIP Systems

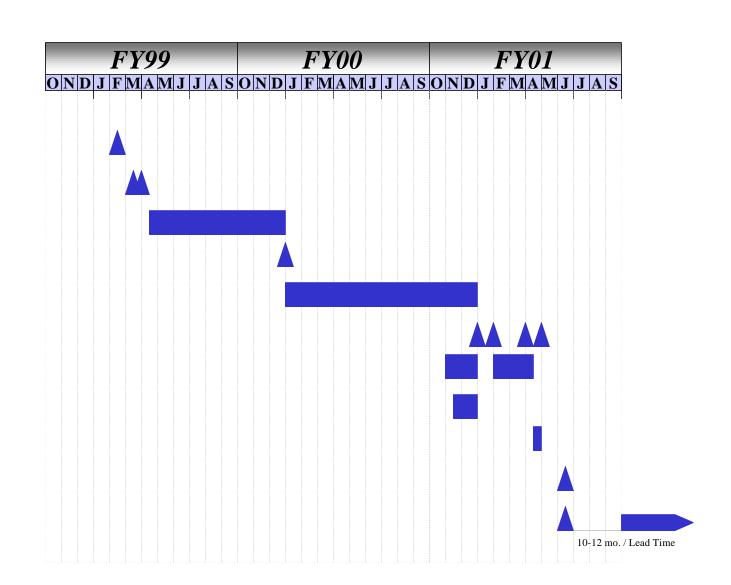
Training

DT User Test (OPTEMPO)

IOTE

MS III & FUE

Production Award



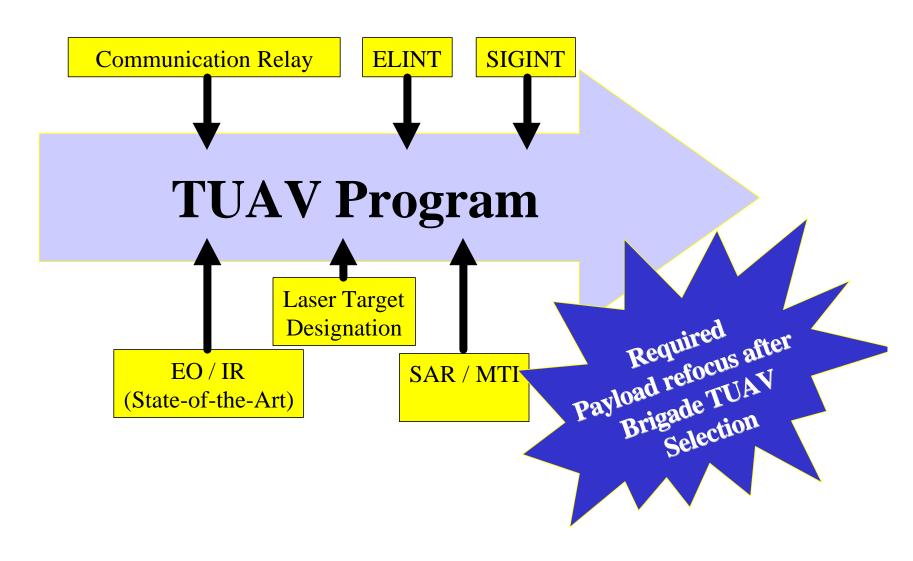


Payload Integration Strategy



— "TUAV-Protecting the Point"

Payload priority + Technology Availability (Payload, Airframe) ⇒ Payload Development





Summary



— "TUAV-Protecting the Point"

- Now....providing a UAV capability with existing Hunter resources
- For the future.....satisfy the Maneuver Brigade Commander's UAV needs Competitive Procurement in process
- For the futureare using legacy systems to define/develop
 - TUAV TTP
 - Combined Arms TTP (with TUAV)
 - Product Improvements